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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/061,342	02/04/2002	Yukio Yamaguchi	740651-0079	4729

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EXAMINER

ROSE, ROBERT A

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/061,342

Applicant(s)
Yamaguchi et al

Examiner
Robert Rose

Art Unit
3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 4, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 11 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, and 8-10 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other:

Art Unit: 3723

DETAILED ACTION

1. Receipt is acknowledged of Applicant's Prior Art Statement, filed February 4, 2002.
2. Receipt is acknowledged of Applicant's Foreign Priority Papers, filed February 4, 2002.
3. Claims 1-11 are presented for examination.
4. Claim 7 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim 7 has not been further treated on the merits.
5. Claims 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 3, line 6 and claim 4, line 6 the phrase "the other end portion" is without proper antecedent support in the claim, thus the scope of the claim is regarded as vague and indefinite.
6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, and 9 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Takeuchi(Japan No. 57-48460). Takeuchi discloses a method of centerless grinding of a workpiece having both a conical end surface and a cylindrical body, comprising all of the subject matter set forth in applicant's claims above. The workpiece is fed axially between a regulating

Art Unit: 3723

wheel and a grinder having a cylindrical and conical working surface, and stops in contact with the conical working surface, to simultaneously grind both portions of the workpiece. With regard to claim 3, enlarged portion G4 is read as the large-diameter step surface, and is part of the second end. With regard to claims 2 and 4, the small conical end of the workpiece is read as an end surface for the purposes of this claim.

8. Claims 2, and 10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Masuda(US 4062150). Masuda disclose all of the subject matter set forth in applicant's claims above. Note the various embodiments of Figures 1-7, which show centerless grinding of a workpiece having a cylindrical surface and an end surface. The workpiece is fed axially between a regulating wheel and a grinding wheel having a cylindrical working surface, end surface, and step surface. The workpiece contacts the step surface of the grinding wheel and the work surfaces are simultaneously ground. A stopper(5a) is used to halt the axial movement of the workpiece to prevent overgrinding. Note weak conical portion of grinding wheel in figure 6.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 6/1-6/4, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeuchi in view of Kojima(Japan No. 63-185557). To simply provide a stopper adjacent the

Art Unit: 3723

workpiece to prevent excessive axial infeeding of the workpiece, to avoid overgrinding would have been obvious in view of Kojima.

11. Claims 5, 6/5, and 11 are allowed.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Binns('593), and Binns('818) are cited of interest to show other centerless grinding machines with stepped grinding surfaces for simultaneously grinding conical and cylindrical surfaces on the workpiece. Jessup et al is cited to show axial infeeding of a stepped workpiece into a centerless grinding machine, similar to the arrangement shown in Masuda.

13. Any inquiry concerning this communication should be directed to Robert Rose at telephone number (703) 308-1360.

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September 26, 2003.

ROBERT A. ROSE
PRIMARY EXAMINER
ART UNIT 323